FIG.1

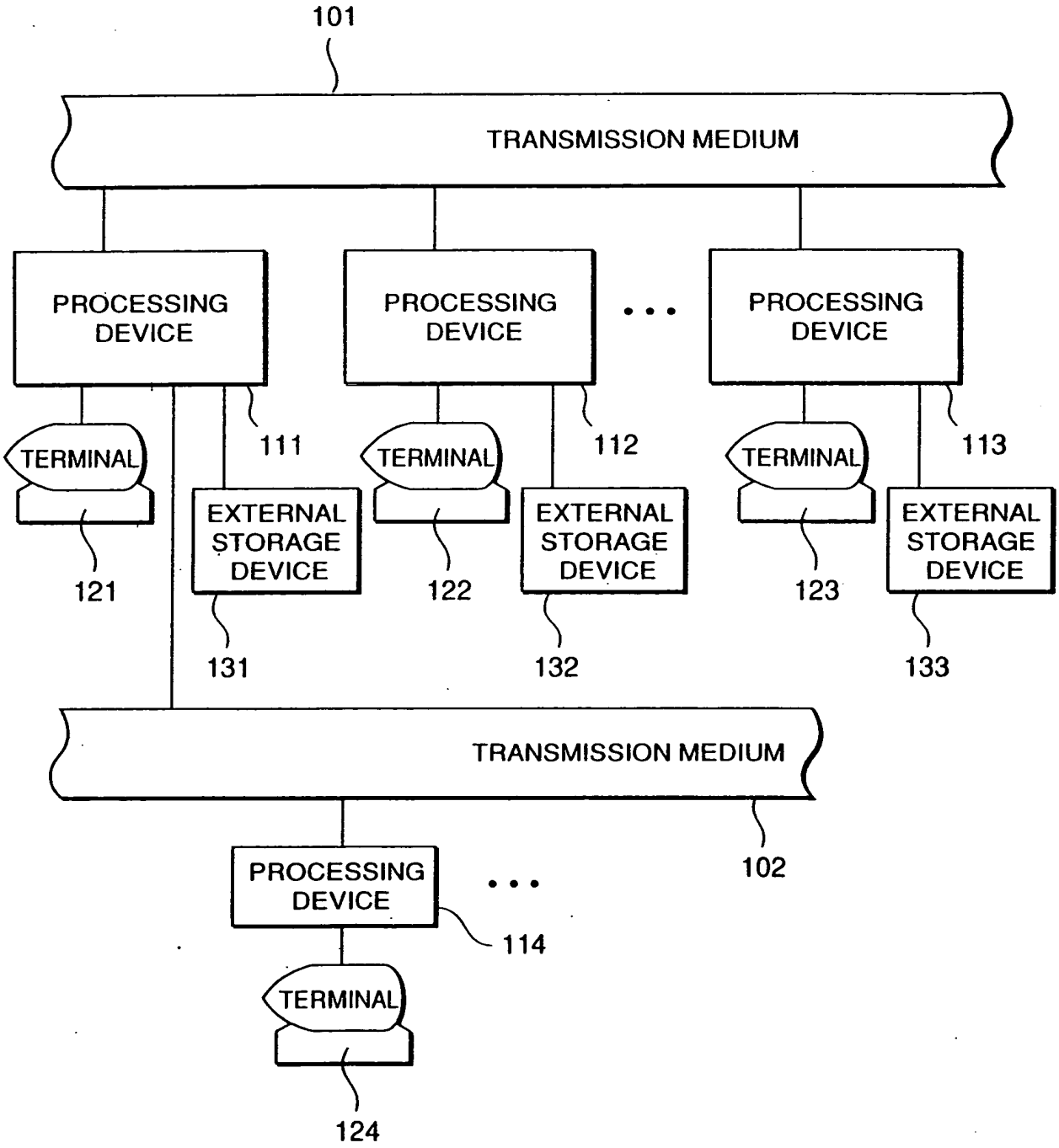

101
TRANSMISSION MEDIUM
PROCESSING DEVICE
PROCESSING DEVICE
PROCESSING DEVICE
TERMINAL
TERMINAL
TERMINAL
111
112
113
EXTERNAL STORAGE DEVICE
EXTERNAL STORAGE DEVICE
EXTERNAL STORAGE DEVICE
121
122
123
131
132
133
TRANSMISSION MEDIUM
102
PROCESSING DEVICE
114
TERMINAL
124

FIG.2

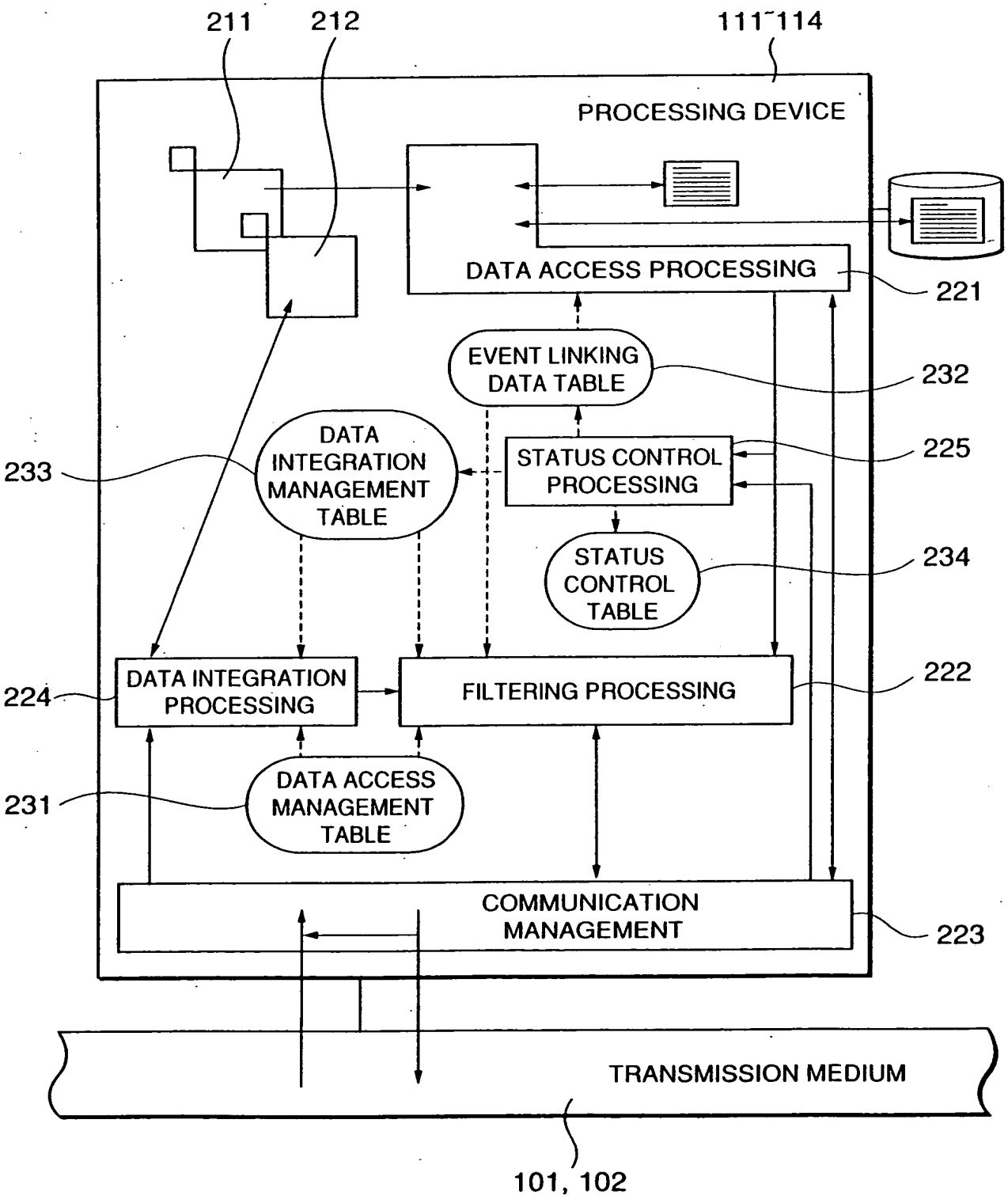

211
212
111~114
PROCESSING DEVICE
DATA ACCESS PROCESSING
221
EVENT LINKING DATA TABLE
232
DATA INTEGRATION MANAGEMENT TABLE
233
STATUS CONTROL PROCESSING
225
STATUS CONTROL TABLE
234
DATA INTEGRATION PROCESSING
224
FILTERING PROCESSING
222
DATA ACCESS MANAGEMENT TABLE
231
COMMUNICATION MANAGEMENT
223
TRANSMISSION MEDIUM
101, 102

FIG.3A

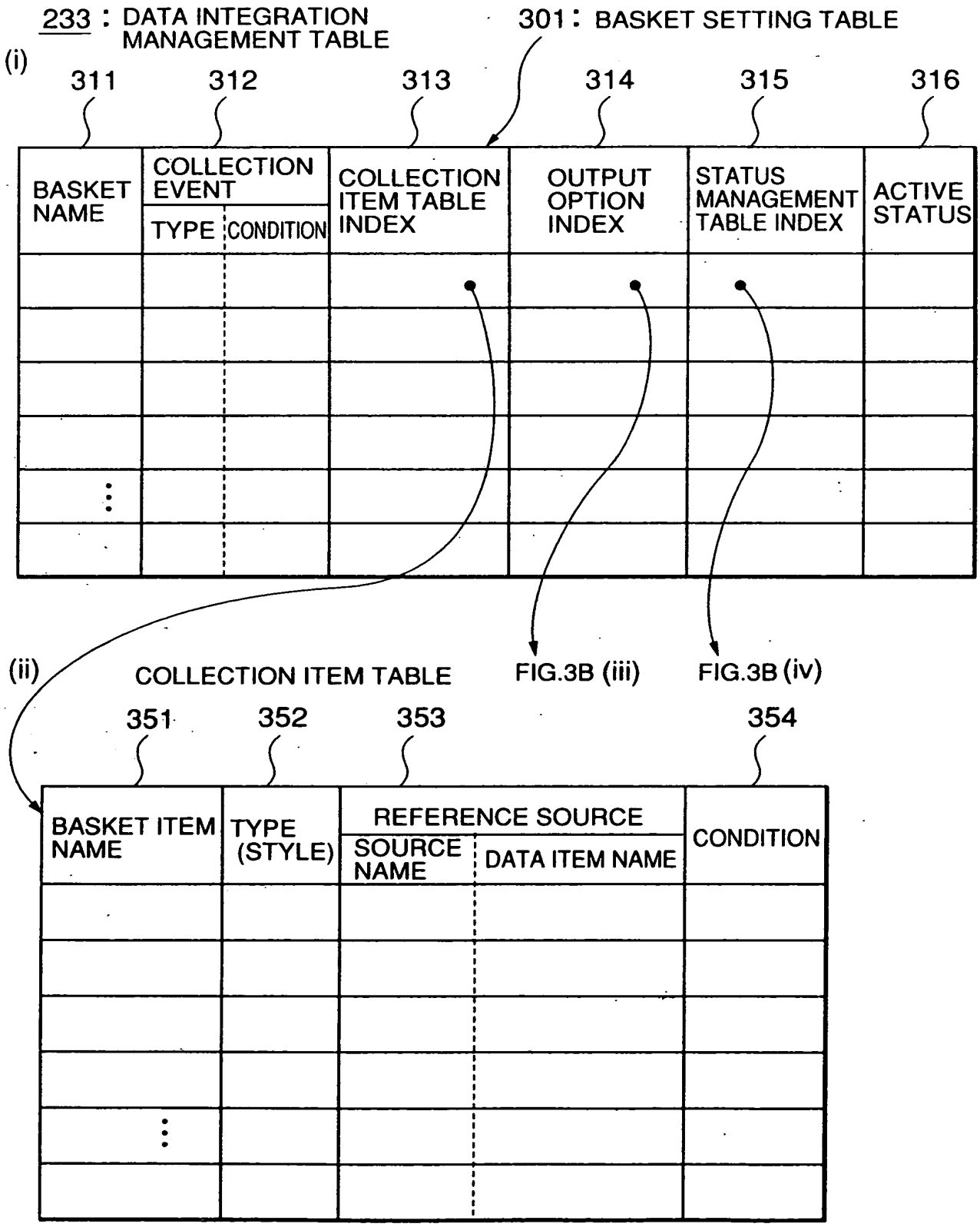

233 : DATA INTEGRATION MANAGEMENT TABLE
301 : BASKET SETTING TABLE
(i)
311
312
313
314
315
316
BASKET NAME
COLLECTION EVENT
TYPE
CONDITION
COLLECTION ITEM TABLE INDEX
OUTPUT OPTION INDEX
STATUS MANAGEMENT TABLE INDEX
ACTIVE STATUS
(ii)
COLLECTION ITEM TABLE
FIG.3B (iii)
FIG.3B (iv)
351
352
353
354
BASKET ITEM NAME
TYPE (STYLE)
REFERENCE SOURCE
SOURCE NAME
DATA ITEM NAME
CONDITION

FIG.3B

(iii) OUTPUT OPTION

372	373	374	375
TIME-OUT	DATA RECEPTION/ DELIVERY METHOD	AND/OR JUDGMENT	DATA REQUEST SIDE

(iv) STATUS MANAGEMENT TABLE

391	392	393	394
EVENT IDENTIFIER	BUFFER INDEX	FIRST EVENT ARRIVAL TIME	COLLECTION JUDGMENT MAP
⋮			

FIG.4

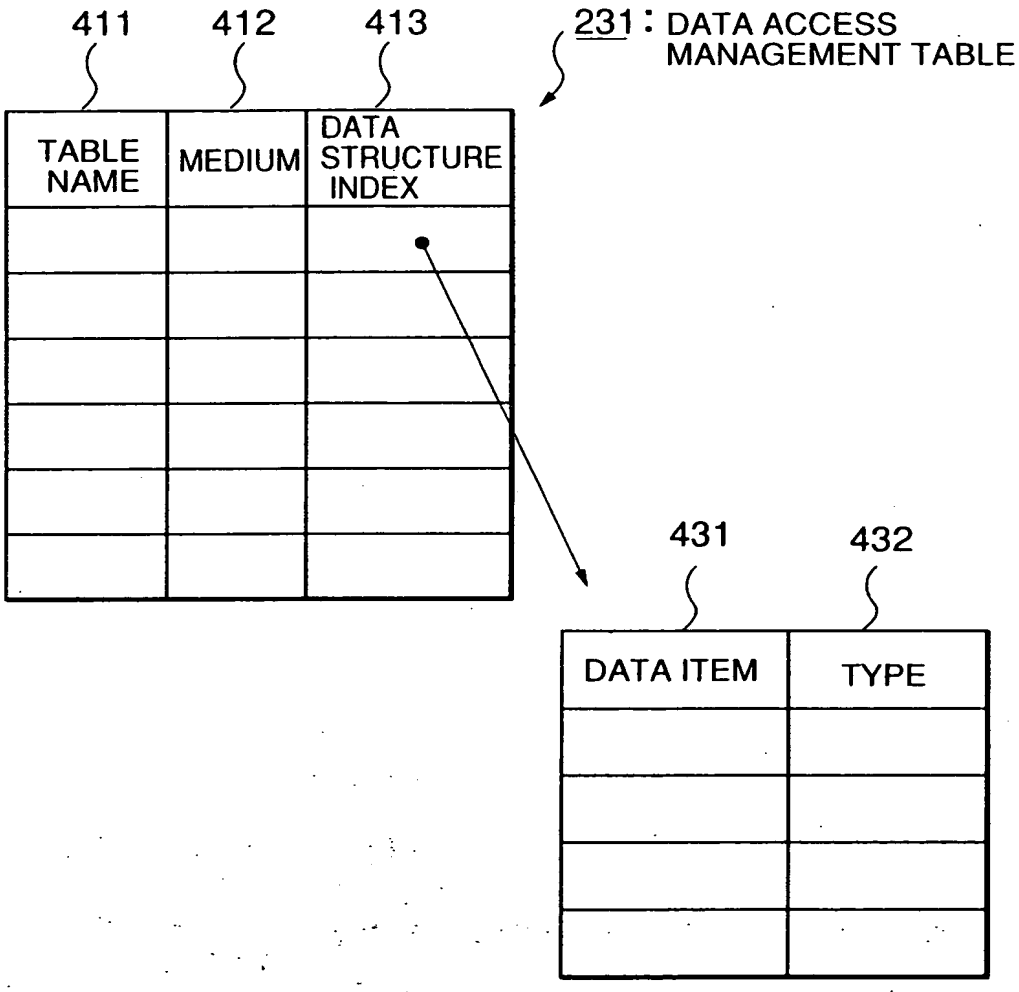

411
412
413
231 : DATA ACCESS MANAGEMENT TABLE
TABLE NAME
MEDIUM
DATA STRUCTURE INDEX
431
432
DATA ITEM
TYPE

FIG.5

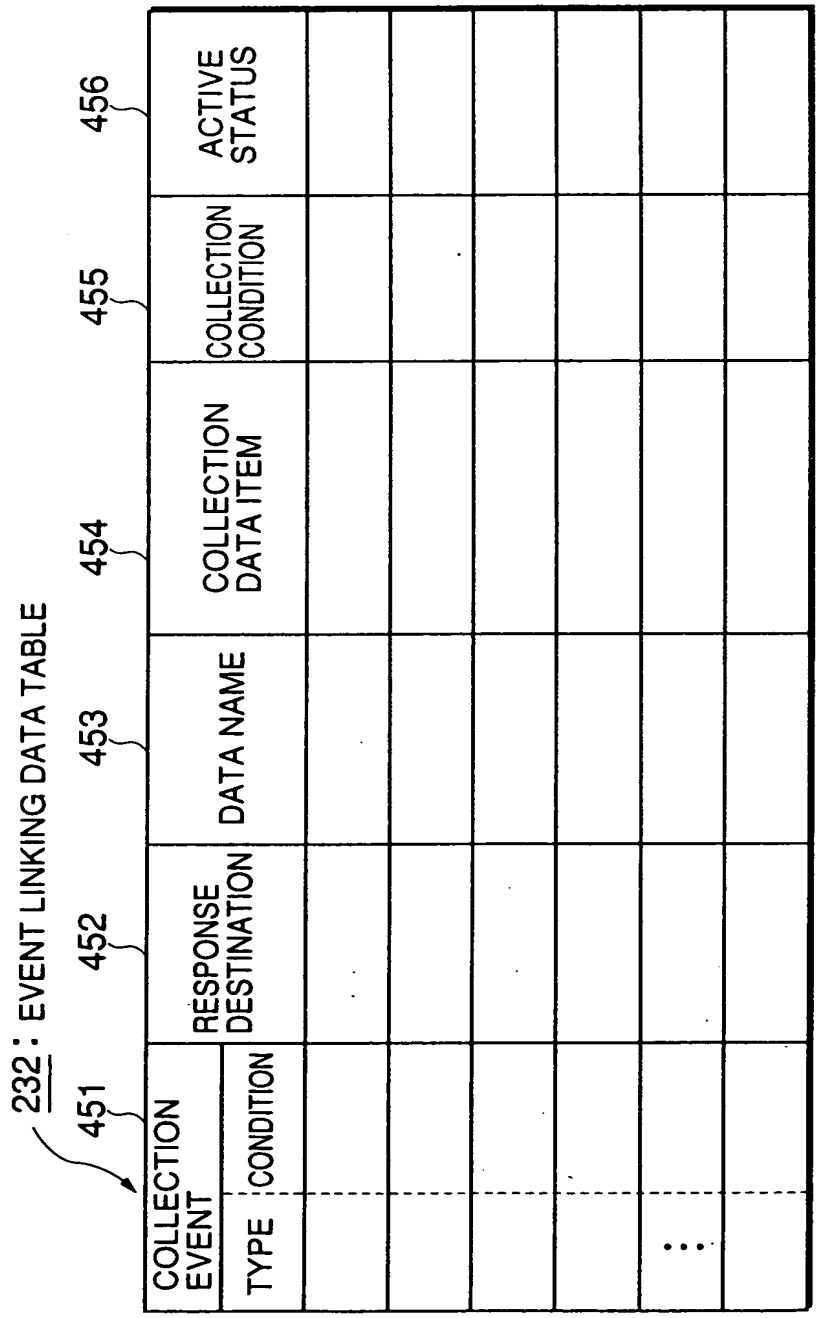

232 : EVENT LINKING DATA TABLE
451
452
453
454
455
456
COLLECTION EVENT
TYPE
CONDITION
RESPONSE DESTINATION
DATA NAME
COLLECTION DATA ITEM
COLLECTION CONDITION
ACTIVE STATUS

FIG.6A

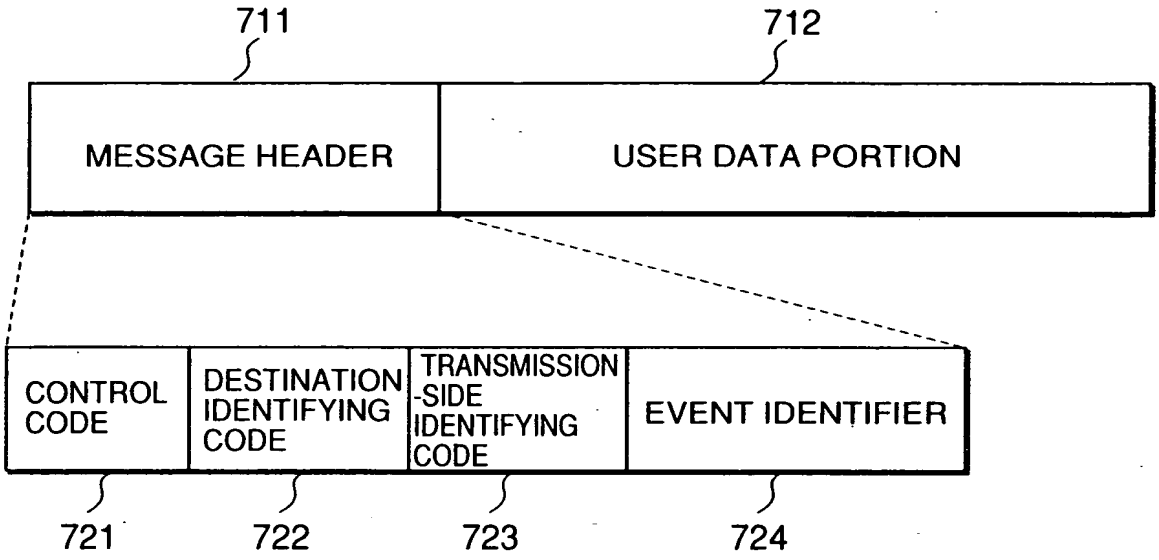

711
712
MESSAGE HEADER
USER DATA PORTION
CONTROL CODE
DESTINATION IDENTIFYING CODE
TRANSMISSION -SIDE IDENTIFYING CODE
EVENT IDENTIFIER
721
722
723
724

FIG.6B

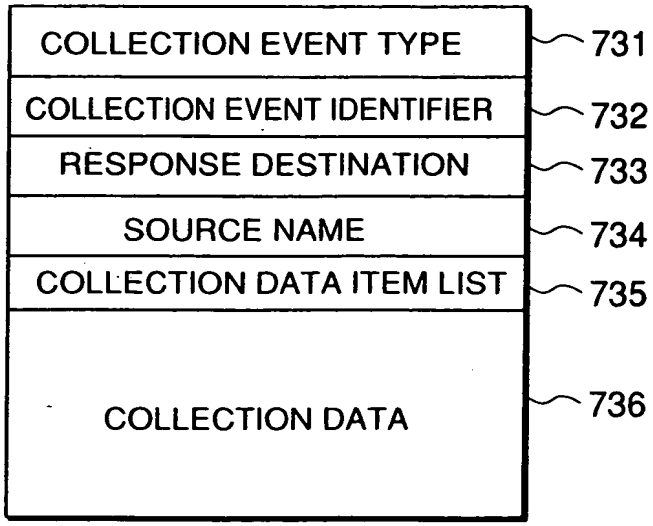

COLLECTION EVENT TYPE
731
COLLECTION EVENT IDENTIFIER
732
RESPONSE DESTINATION
733
SOURCE NAME
734
COLLECTION DATA ITEM LIST
735
COLLECTION DATA
736

FIG.7

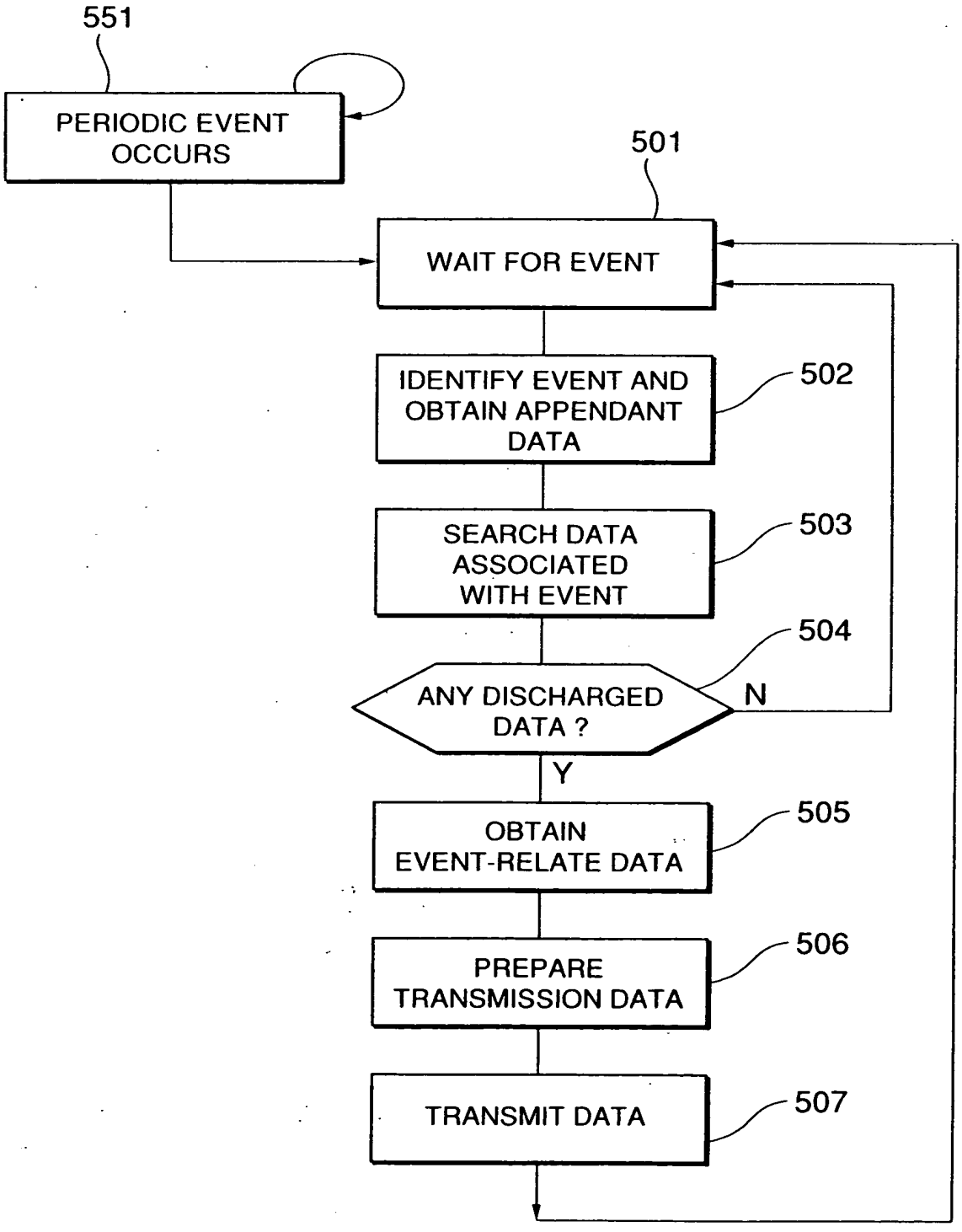

551
PERIODIC EVENT OCCURS
501
WAIT FOR EVENT
IDENTIFY EVENT AND OBTAIN APPENDANT DATA
502
SEARCH DATA ASSOCIATED WITH EVENT
503
ANY DISCHARGED DATA ?
504
N
Y
OBTAIN EVENT-RELATE DATA
505
PREPARE TRANSMISSION DATA
506
TRANSMIT DATA
507

FIG.8A

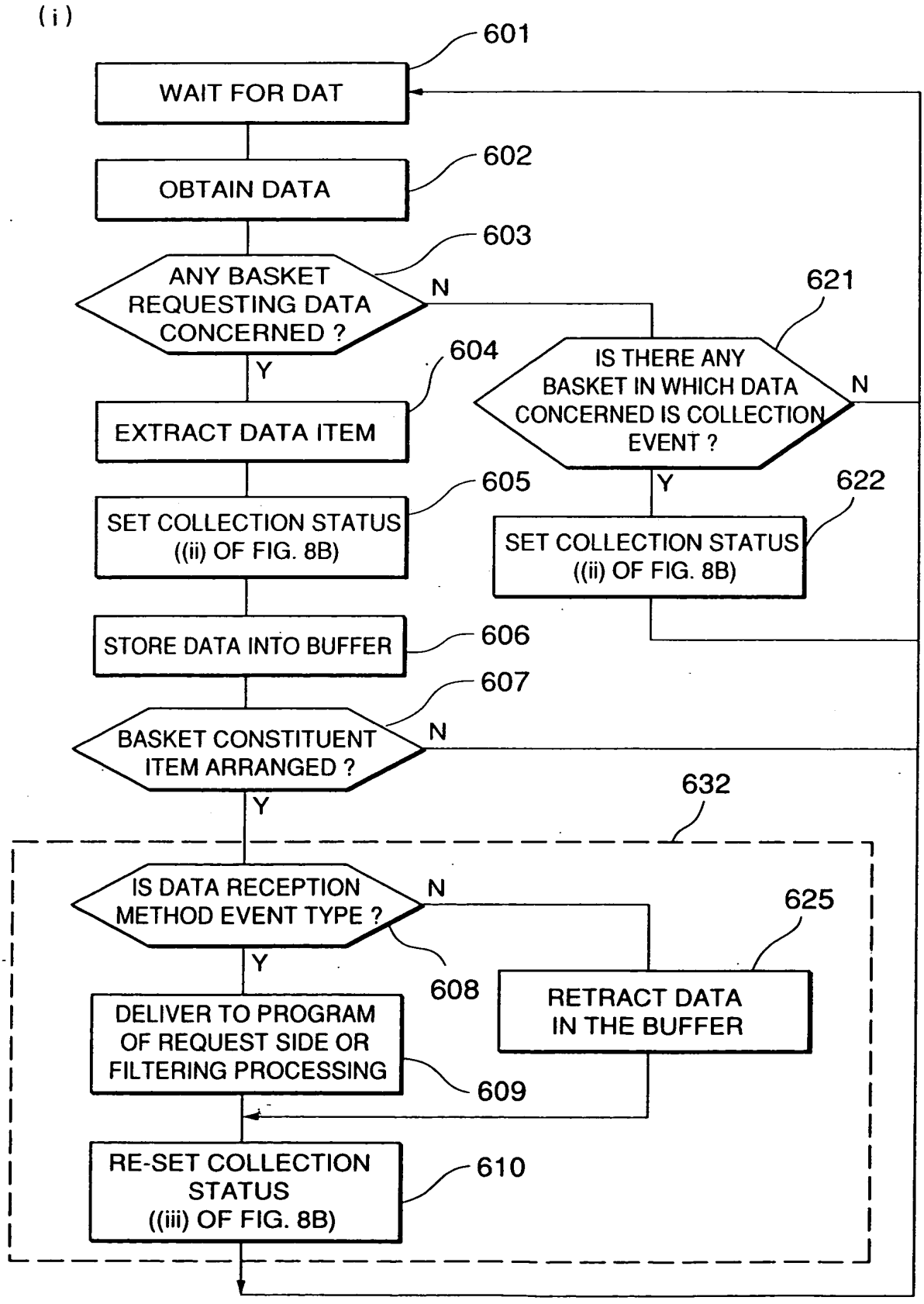
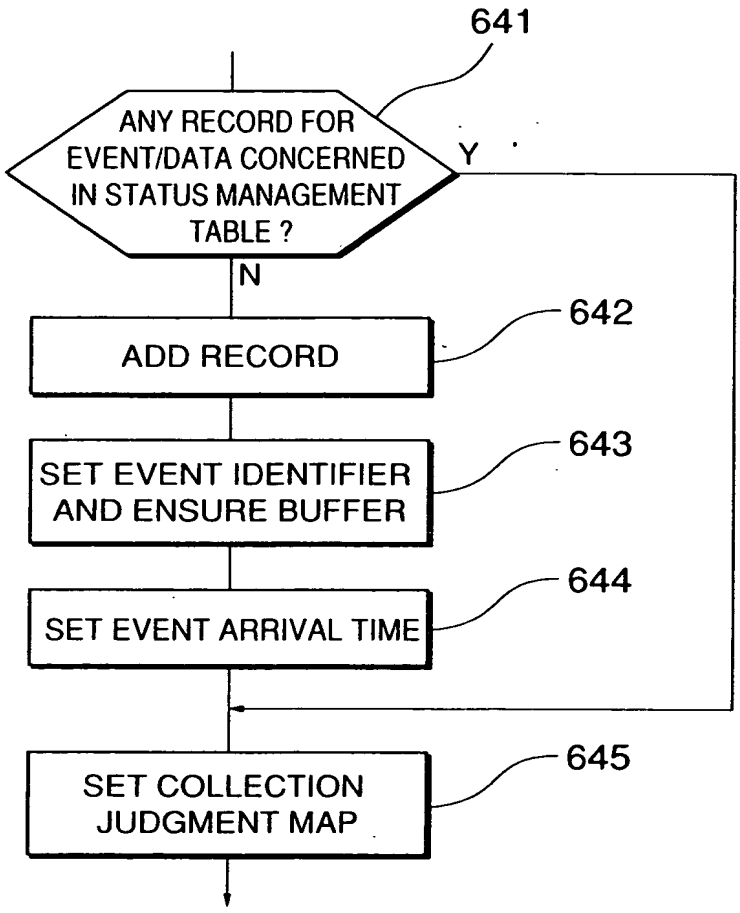

(i)
601
WAIT FOR DAT
602
OBTAIN DATA
603
ANY BASKET REQUESTING DATA CONCERNED ?
N
621
IS THERE ANY BASKET IN WHICH DATA CONCERNED IS COLLECTION EVENT ?
N
Y
604
EXTRACT DATA ITEM
605
SET COLLECTION STATUS ((ii) OF FIG. 8B)
622
SET COLLECTION STATUS ((ii) OF FIG. 8B)
606
STORE DATA INTO BUFFER
607
BASKET CONSTITUENT ITEM ARRANGED ?
N
Y
632
IS DATA RECEPTION METHOD EVENT TYPE ?
N
625
Y
608
DELIVER TO PROGRAM OF REQUEST SIDE OR FILTERING PROCESSING
RETRACT DATA IN THE BUFFER
609
RE-SET COLLECTION STATUS ((iii) OF FIG. 8B)
610

FIG.8B

(ii)


641
ANY RECORD FOR EVENT/DATA CONCERNED IN STATUS MANAGEMENT TABLE ?
Y
N
642
ADD RECORD
643
SET EVENT IDENTIFIER AND ENSURE BUFFER
644
SET EVENT ARRIVAL TIME
645
SET COLLECTION JUDGMENT MAP

(iii)

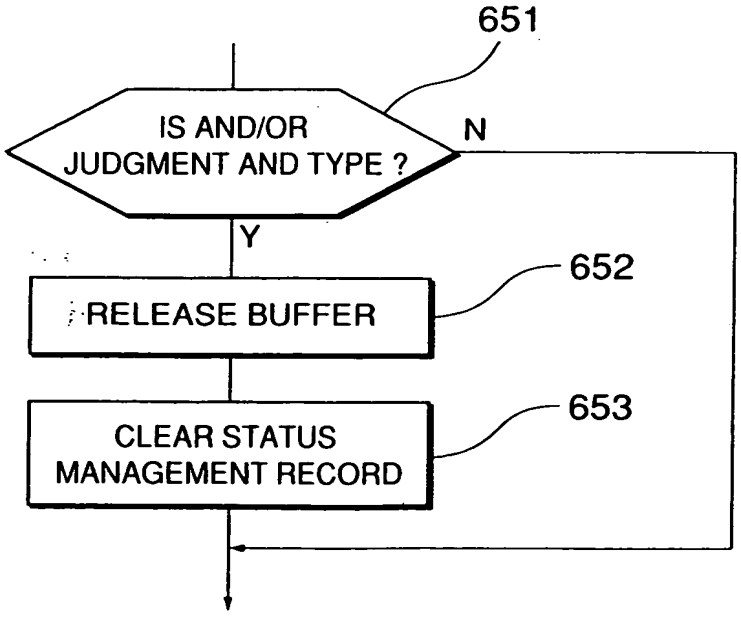

651
IS AND/OR JUDGMENT AND TYPE ?
N
Y
652
RELEASE BUFFER
653
CLEAR STATUS MANAGEMENT RECORD

FIG.8C

(iv)

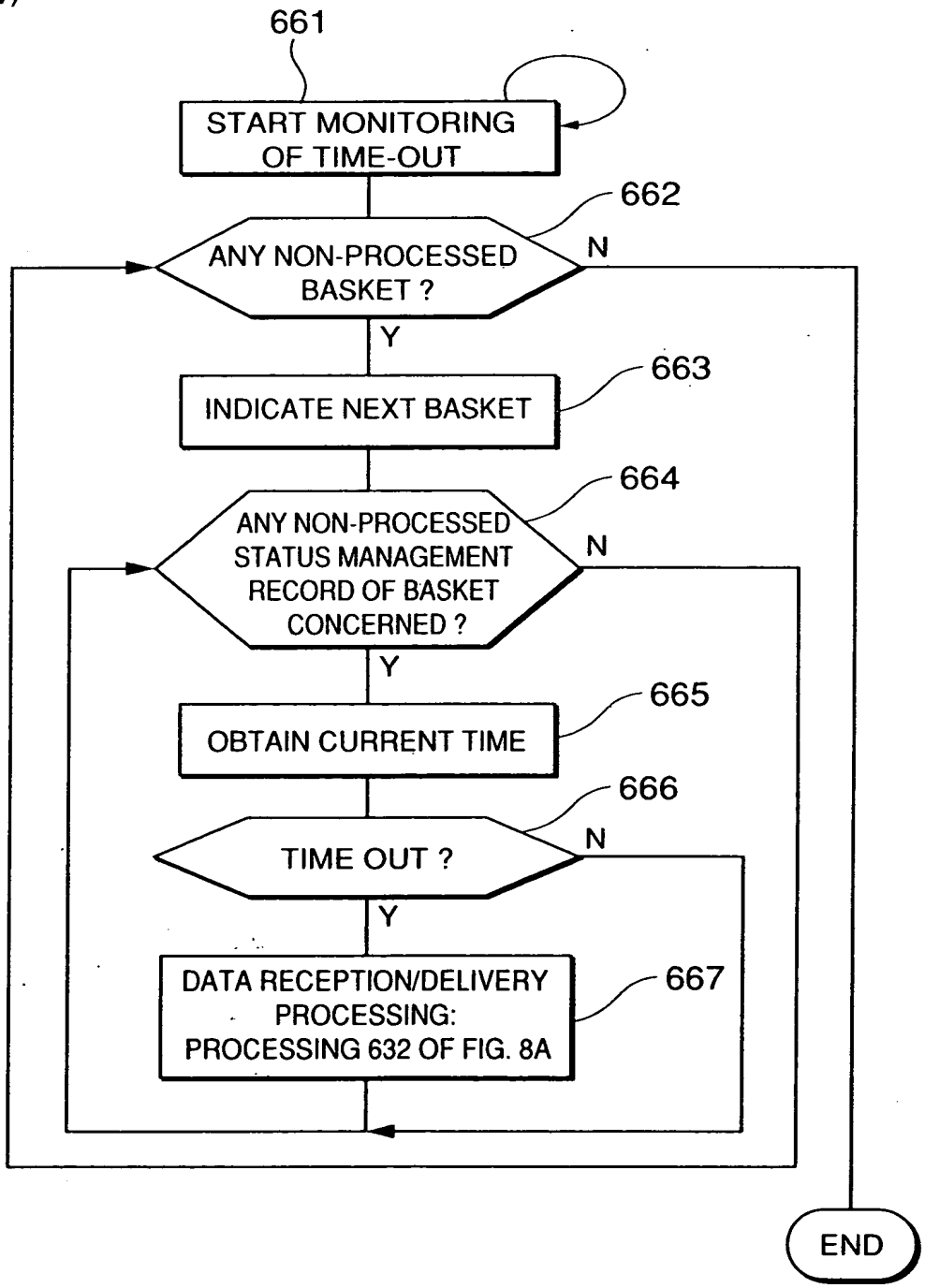

661
START MONITORING OF TIME-OUT
662
ANY NON-PROCESSED BASKET ?
N
Y
663
INDICATE NEXT BASKET
664
ANY NON-PROCESSED STATUS MANAGEMENT RECORD OF BASKET CONCERNED ?
N
Y
665
OBTAIN CURRENT TIME
666
TIME OUT ?
N
Y
667
DATA RECEPTION/DELIVERY PROCESSING: PROCESSING 632 OF FIG. 8A
END

FIG.9

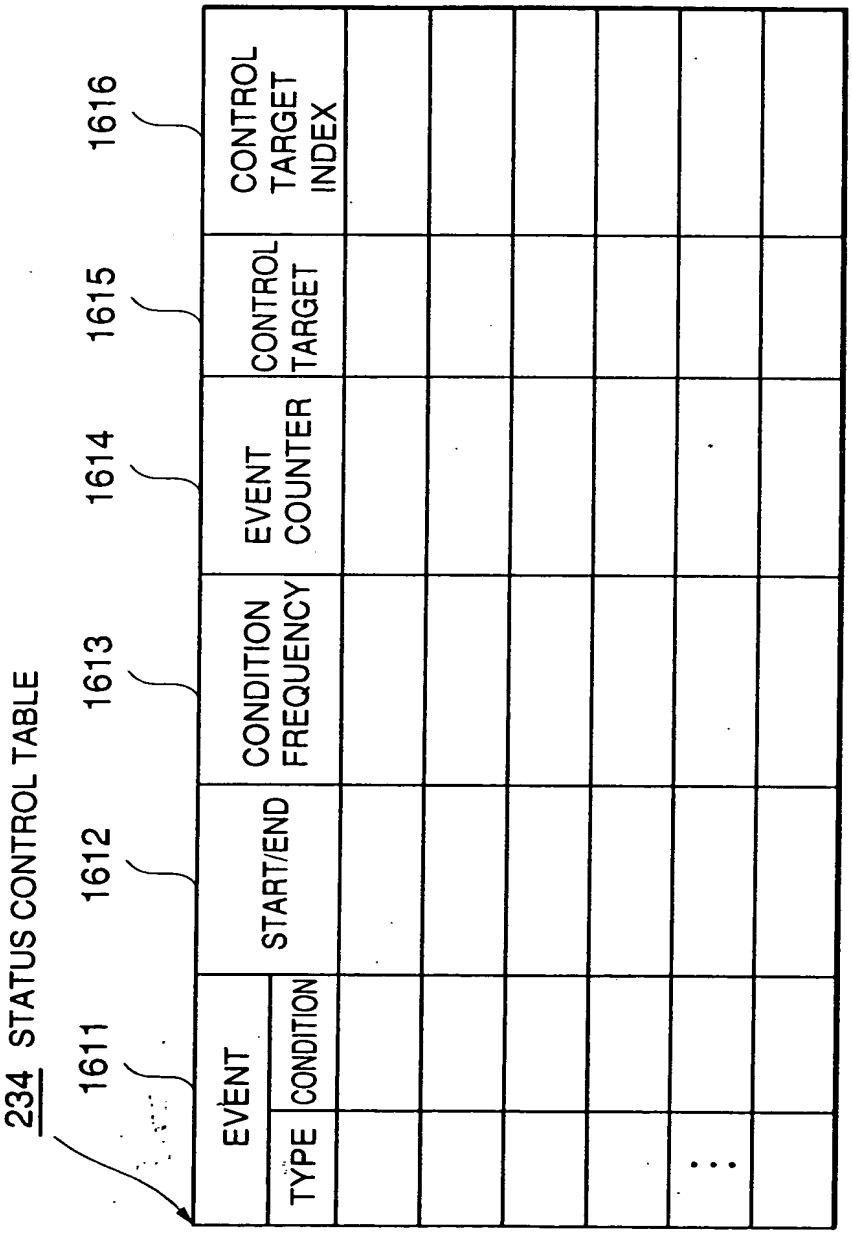

234 STATUS CONTROL TABLE
1611
1612
1613
1614
1615
1616
EVENT
TYPE
CONDITION
START/END
CONDITION FREQUENCY
EVENT COUNTER
CONTROL TARGET
CONTROL TARGET INDEX
...

FIG.10

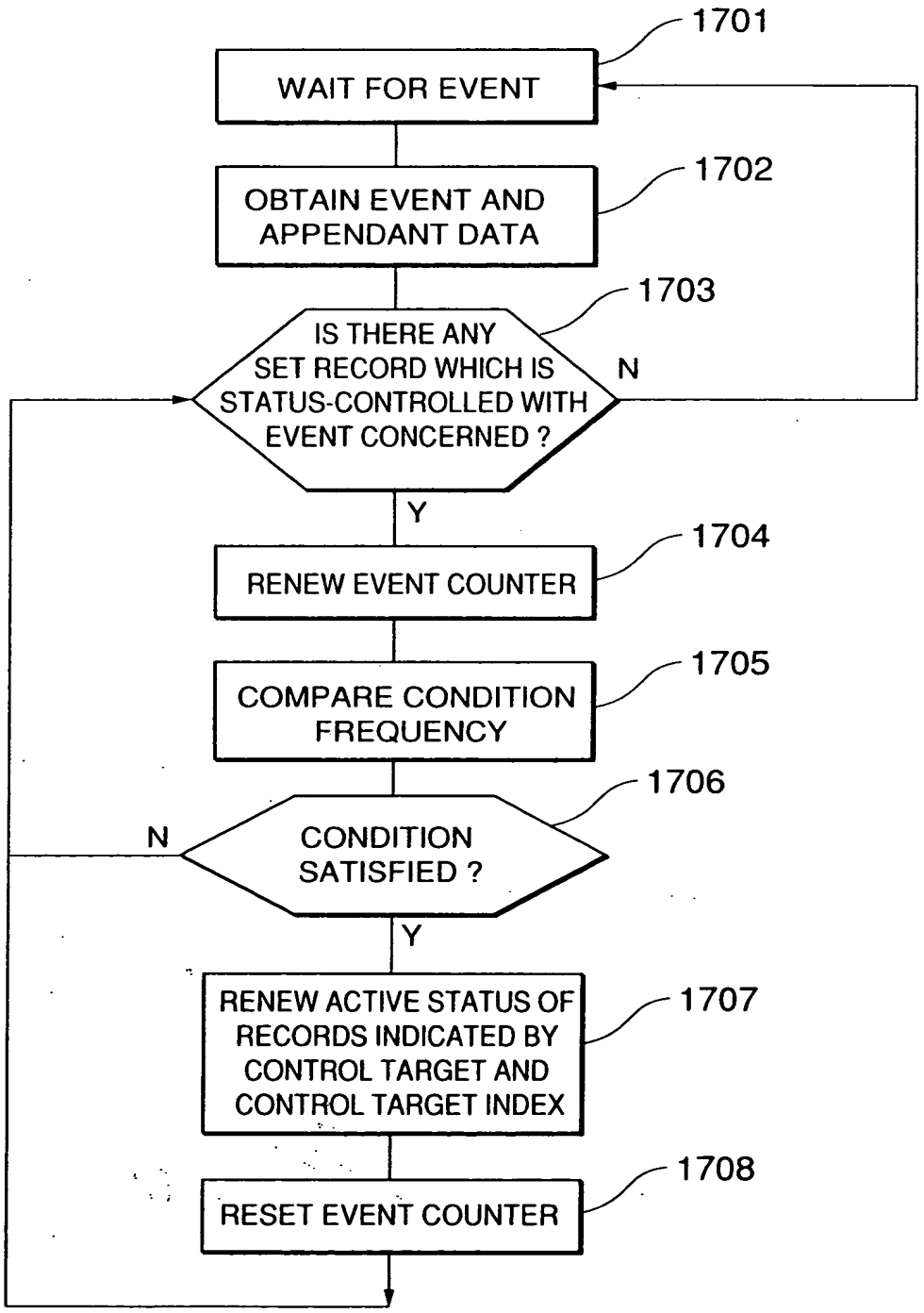

1701
WAIT FOR EVENT
1702
OBTAIN EVENT AND APPENDANT DATA
1703
IS THERE ANY SET RECORD WHICH IS STATUS-CONTROLLED WITH EVENT CONCERNED ?
N
Y
1704
RENEW EVENT COUNTER
1705
COMPARE CONDITION FREQUENCY
1706
CONDITION SATISFIED ?
N
Y
1707
RENEW ACTIVE STATUS OF RECORDS INDICATED BY CONTROL TARGET AND CONTROL TARGET INDEX
1708
RESET EVENT COUNTER

FIG.11

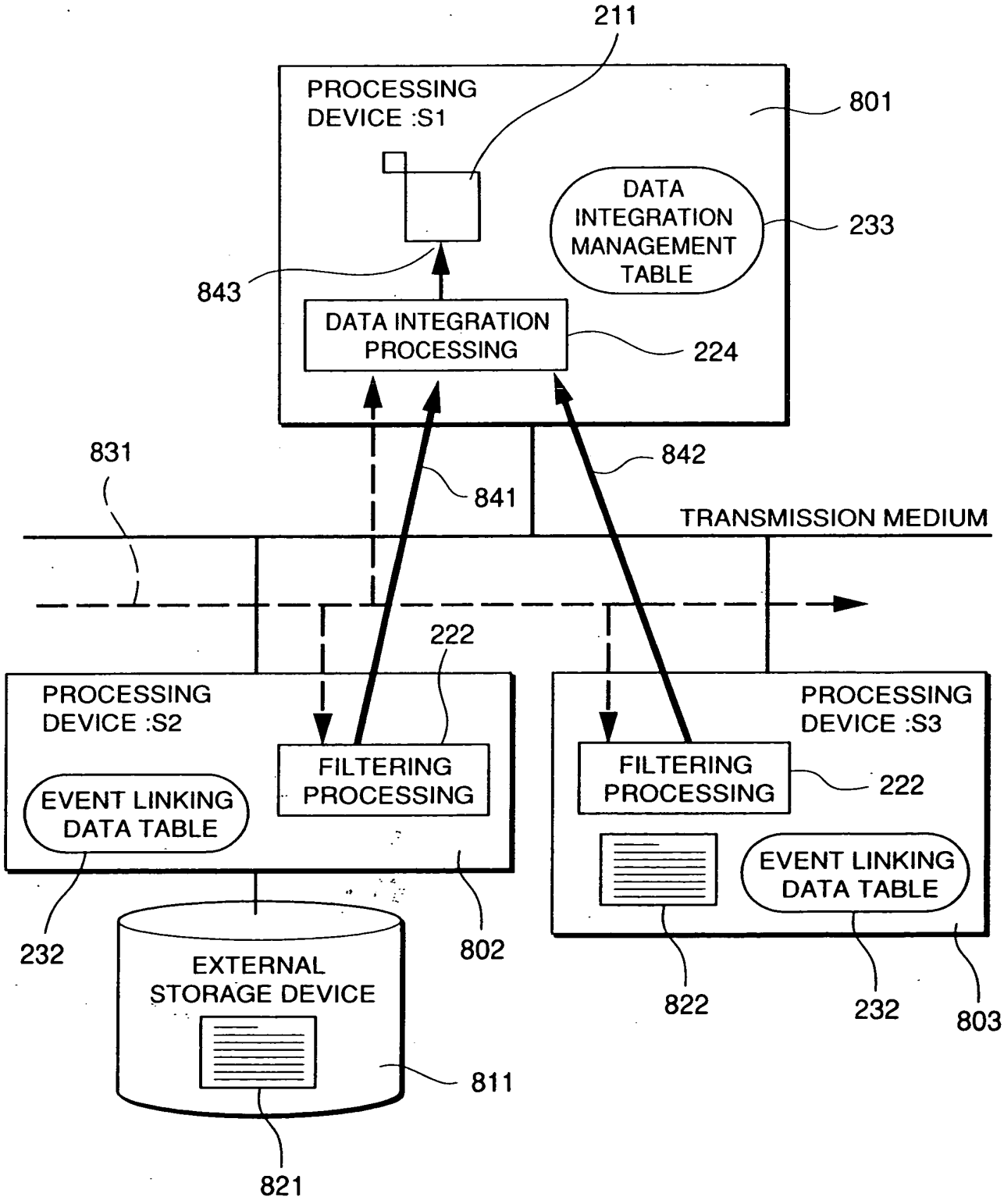

211
PROCESSING DEVICE :S1
801
DATA INTEGRATION MANAGEMENT TABLE
233
843
DATA INTEGRATION PROCESSING
224
831
841
842
TRANSMISSION MEDIUM
222
PROCESSING DEVICE :S2
FILTERING PROCESSING
EVENT LINKING DATA TABLE
PROCESSING DEVICE :S3
FILTERING PROCESSING
222
EVENT LINKING DATA TABLE
232
802
EXTERNAL STORAGE DEVICE
811
821
822
232
803

FIG.12A

(i)

712

PART ID	Lot No.	QUALITY REFERENCE VALUE	PRE-PROCESSING RESULT VALUE

(ii)

821

PART ID	QUALITY REFERENCE VALUE	CONDITION VALUE 1	CONDITION VALUE 2	RENEWAL TIME
⋮				

(iii)

822

	Lot No.	Lot TRACK RECORD	RENEWAL TIME
916			
917			
918			
	⋮		
919			

FIG.12B

(iv)

233:DATA INTEGRATION MANAGEMENT TABLE

301:BASKET SETTING TABLE

	BASKET NAME	COLLECTION EVENT		COLLECTION ITEM TABLE INDEX	OUTPUT OPTION INDEX	STATUS MANAGEMENT TABLE INDEX	ACTIVE STATUS
		TYPE	CONDITION				
921	PRODUCTION INSTRUCTION	Msg:LINE ACCESS	PART ID>1000	●	●	●	1
	⋮						

(v)

	BASKET ITEM NAME	TYPE (STYLE)	REFERENCE SOURCE		CONDITION
			SOURCE NAME	DATA ITEM NAME	
941	PART ID	long	Msg: LINE ACCESS	PART ID	
942	Lot No.	long	Msg: LINE ACCESS	Lot No.	
943	PROCESSING CONDITION VALUE 1	short	S2: MANUFACTURING CONDITION	CONDITION VALUE 1	MANUFACTURING CONDITION, PART ID = LINE ACCESS, PART ID
944	PROCESSING CONDITION VALUE 2	char(6)	S2: MANUFACTURING CONDITION	CONDITION VALUE 2	"MANUFACTURING CONDITION, PART ID = LINE ACCESS, PART ID" &, "MANUFACTURING CONDITION, QUALITY REFERENCE >= LINE ACCESS, EQUALITY REFERENCE VALUE"
945	PRODUCTION TRACK RECORD	long	S3:MANUFACTURING TRACK RECORD	Lot TRACK PART	MANUFACTURING TRACK RECORD Lot No.= LINE ACCESS Lot No.

FIG.12C

(vi) 232:EVENT LINKING DATA TABLE

	COLLECTION EVENT		RESPONSE DESTINATION	DATA NAME	COLLECTION DATA ITEM	COLLECTION CONDITION	ACTIVE STATUS
951	TYPE	CONDITION					
952	Msg: LINE ACCESS	PART ID>1000	S1	MANUFACTURING CONDITION	CONDITION VALUE 1	MANUFACTURING CONDITION, PART ID=LINE ACCESS, PART ID	1
	Msg:LINE ACCESS	PART ID>1000	S1	MANUFACTURING CONDITION	CONDITION VALUE 2	"MANUFACTURING CONDITION, PART ID=LINE ACCESS, PART ID" & "MANUFACTURING CONDITION, QUALITY REFERENCE >=LINE ACCESS, QUALITY REFERENCE VALUE"	1
	⋮						

(vii) 232:EVENT LINKING DATA TABLE

	COLLECTION EVENT		RESPONSE DESTINATION	DATA NAME	COLLECTION DATA ITEM	COLLECTION CONDITION	ACTIVE STATUS
	TYPE	CONDITION					
961	Msg:LINE ACCESS	PART ID>1000	S1	MANUFACTURING TRACK RECORD	Lot TRACK RECORD VALUE	MANUFACTURING TRACK RECORD, Lot No. = LINE ACCESS, Lot No.	1
	⋮						

FIG.13

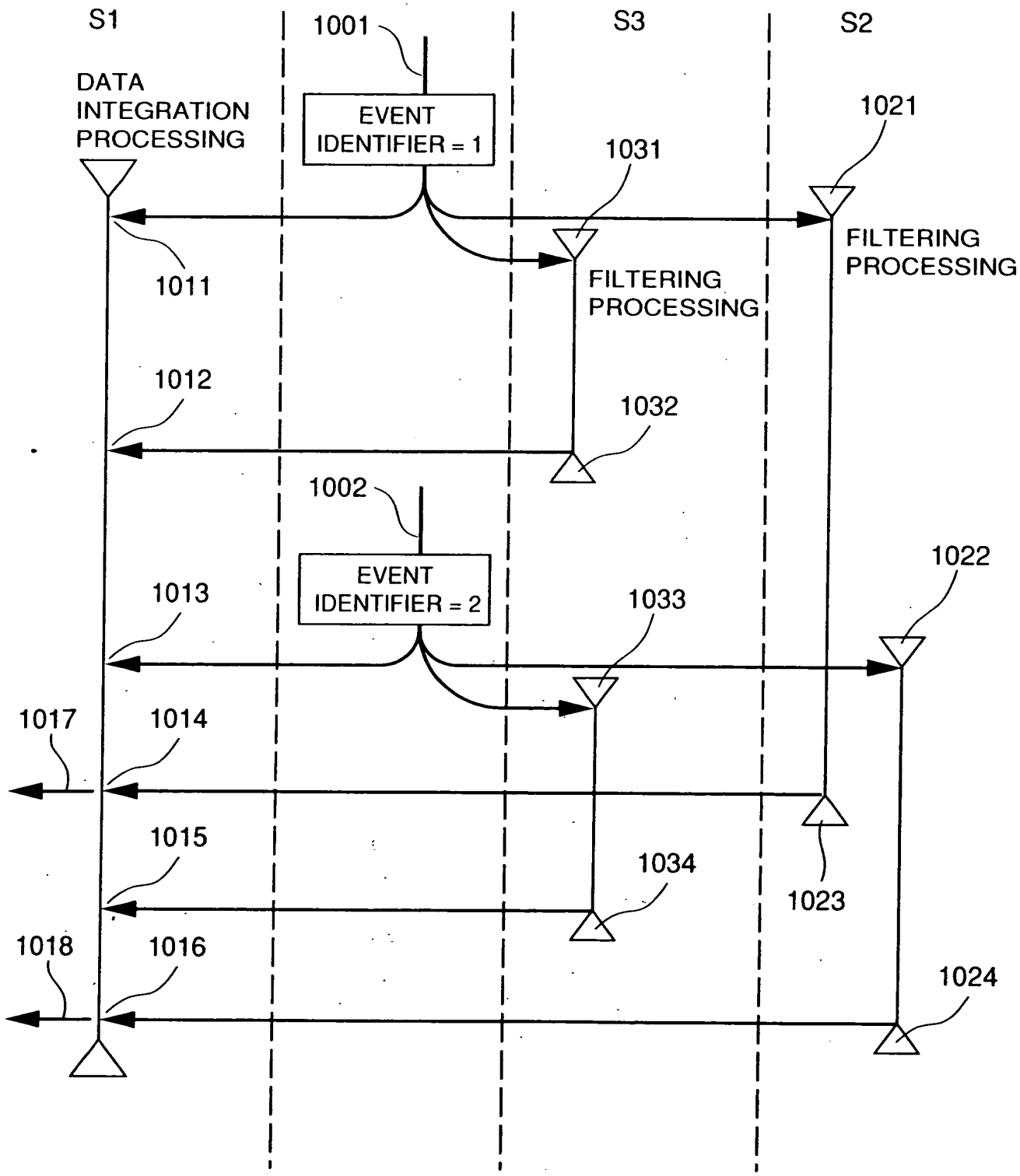

S1
1001
S3
S2
DATA INTEGRATION PROCESSING
EVENT IDENTIFIER = 1
1021
1031
1011
FILTERING PROCESSING
FILTERING PROCESSING
1012
1032
1002
EVENT IDENTIFIER = 2
1022
1013
1033
1017
1014
1015
1034
1023
1018
1016
1024

FIG.14

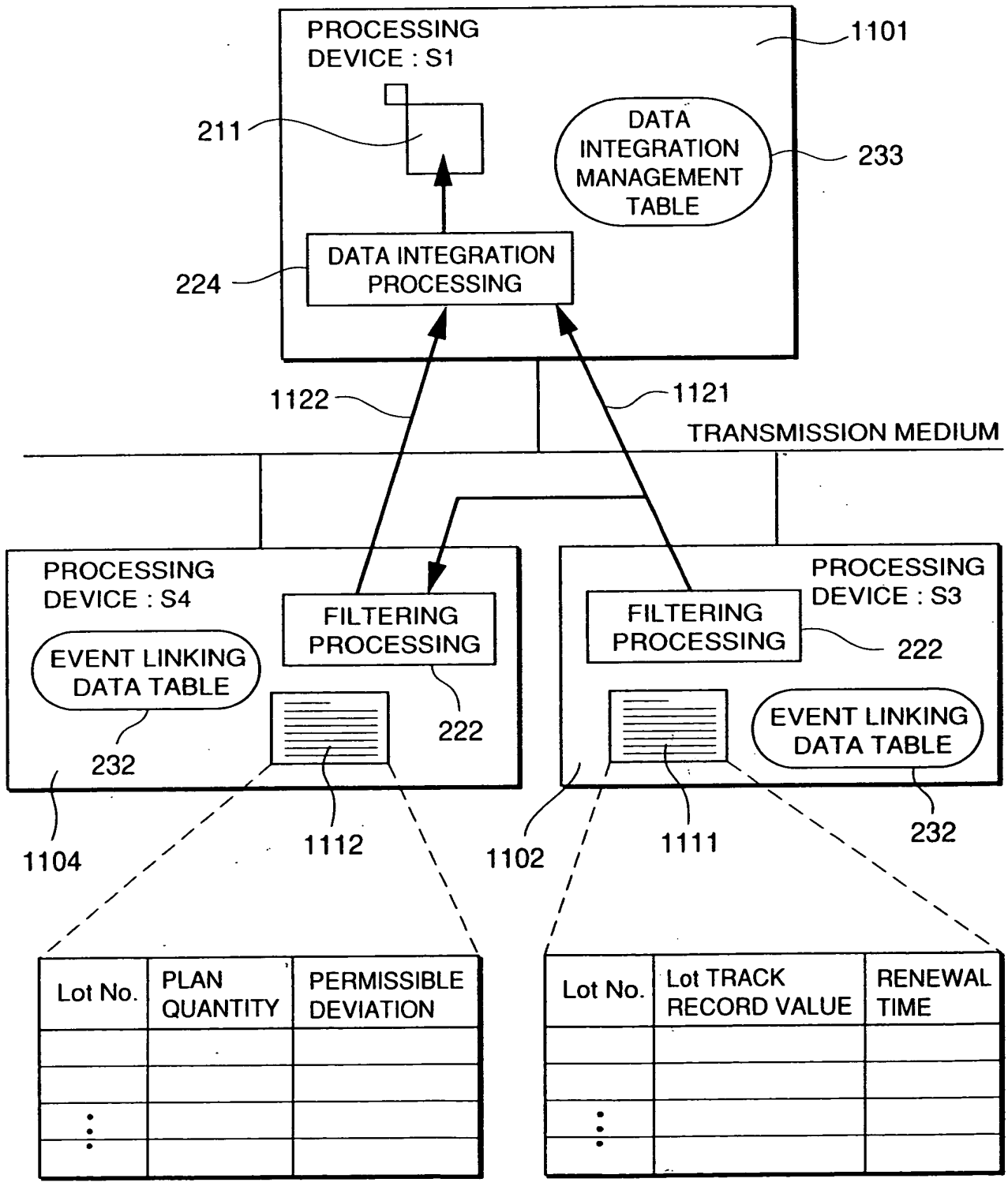

PROCESSING DEVICE : S1
1101
211
DATA INTEGRATION MANAGEMENT TABLE
233
DATA INTEGRATION PROCESSING
224
1122
1121
TRANSMISSION MEDIUM
PROCESSING DEVICE : S4
FILTERING PROCESSING
222
EVENT LINKING DATA TABLE
232
1104
1112
PROCESSING DEVICE : S3
FILTERING PROCESSING
222
EVENT LINKING DATA TABLE
232
1102
1111
Lot No.
PLAN QUANTITY
PERMISSIBLE DEVIATION
Lot No.
Lot TRACK RECORD VALUE
RENEWAL TIME

FIG.15A

233:DATA INTEGRATION MANAGEMENT TABLE

301:BASKET SETTING TABLE

BASKET NAME	COLLECTION EVENT		COLLECTION ITEM TABLE INDEX	OUTPUT OPTION INDEX	STATUS MANAGEMENT TABLE INDEX	ACTIVE STATUS
	TYPE	CONDITION				
1211 ADVANCE	Upd:S3:MANUFACTURING TRACK RECORD	Lot TRACK RECORD VALUE	●			1

BASKET ITEM NAME	TYPE (STYLE)	REFERENCE SOURCE		CONDITION
		SOURCE NAME	DATA ITEM NAME	
1231 Lot No.	long	S3: MANUFACTURING TRACK RECORD	Lot No.	
1232 PRODUCTION TRACK RECORD VALUE	long	S3:MANUFACTURING TRACK RECORD	Lot TRACK RECORD VALUE	
1233 PRODUCTION PLAN QUANTITY	long	S4: MANUFACTURING PLAN	PLAN QUANTITY	MANUFACTURING TRACK RECORD. Lot No.= MANUFACTURING PLAN Lot. No.

FIG.15B

1241 232:EVENT LINKING DATA TABLE

COLLECTION EVENT		RESPONSE DESTINATION	DATA NAME	COLLECTION DATA ITEM	COLLECTION CONDITION	ACTIVE STATUS
TYPE	CONDITION					
Upd:MANUFACTURING TRACK RECORD	Lot TRACK RECORD VALUE	S1,S4	MANUFACTURING TRACK RECORD	Lot No		1
1242 Upd:MANUFACTURING TRACK RECORD	Lot TRACK RECORD VALUE	S1,S4	MANUFACTURING TRACK RECORD	Lot TRACK RECORD		

FIG.15C

232:EVENT LINKING DATA TABLE

COLLECTION EVENT		RESPONSE DESTINATION	DATA NAME	COLLECTION DATA ITEM	COLLECTION CONDITION	ACTIVE STATUS
TYPE	CONDITION					
Upd:S3:MANUFACTURING TRACK RECORD	Lot TRACK RECORD VALUE	S1	MANUFACTURING PLAN	PLAN QUANTITY	MANUFACTURING TRACK RECORD. Lot No.= MANUFACTURING PLAN. Lot No.	1
1251 :						

FIG.16

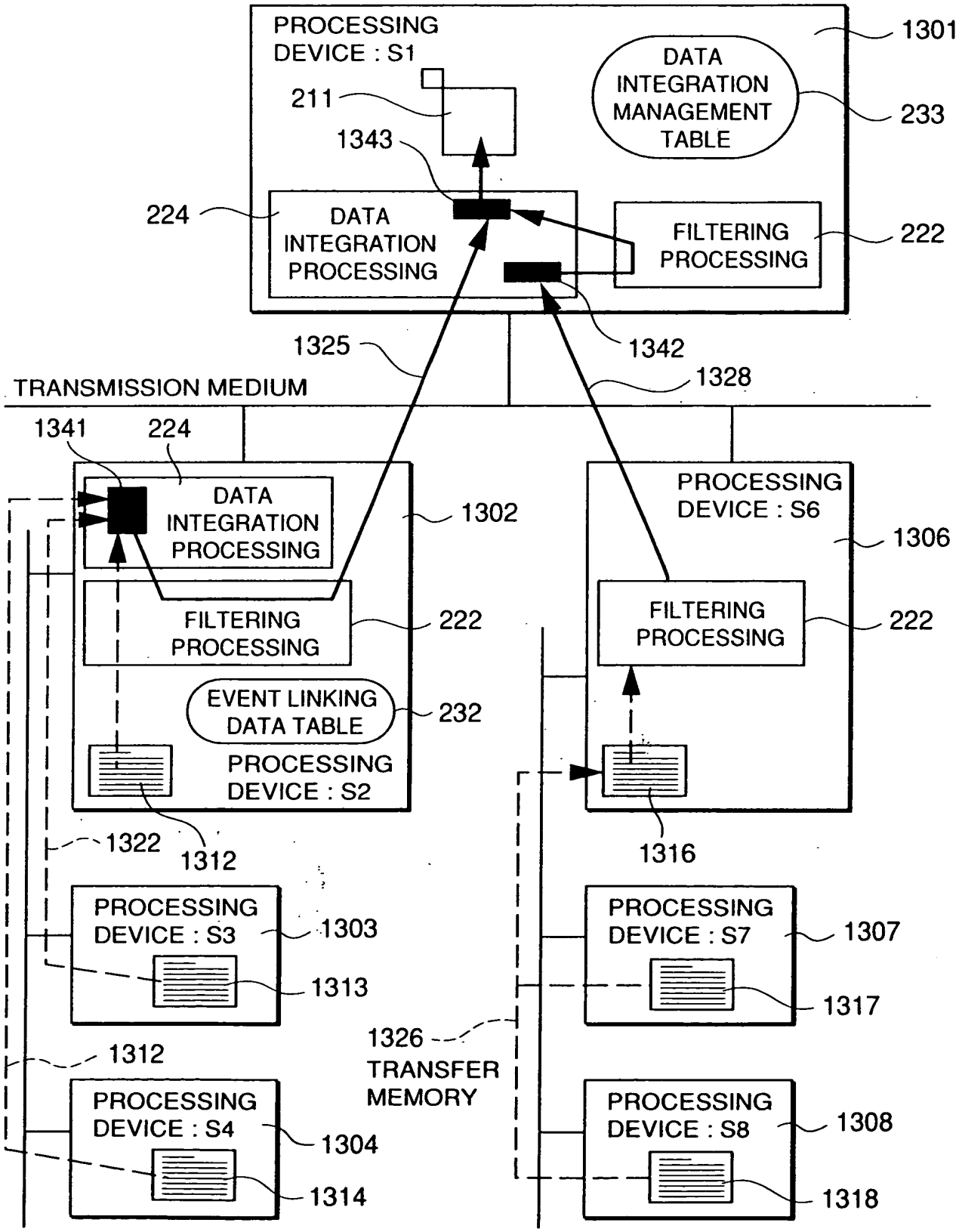

PROCESSING DEVICE : S1
1301
DATA INTEGRATION MANAGEMENT TABLE
233
211
1343
224
DATA INTEGRATION PROCESSING
FILTERING PROCESSING
222
1342
1325
1328
TRANSMISSION MEDIUM
1341
224
DATA INTEGRATION PROCESSING
1302
FILTERING PROCESSING
222
EVENT LINKING DATA TABLE
232
PROCESSING DEVICE : S2
1322
1312
PROCESSING DEVICE : S6
1306
FILTERING PROCESSING
222
1316
PROCESSING DEVICE : S3
1303
1313
1312
PROCESSING DEVICE : S4
1304
1314
1326
TRANSFER MEMORY
PROCESSING DEVICE : S7
1307
1317
PROCESSING DEVICE : S8
1308
1318

FIG.17A

233:DATA INTEGRATION MANAGEMENT TABLE

301:BASKET SETTING TABLE

	BASKET NAME	COLLECTION EVENT		COLLECTION ITEM TABLE INDEX	OUTPUT OPTION INDEX	STATUS MANAGEMENT TABLE INDEX	ACTIVE STATUS
		TYPE	CONDITION				
1411	STATUS MONITOR			●			1
1412	Net3 STATUS	Upd:S6: STATUS TABLE		●			1
	⋮						

	BASKET ITEM NAME	TYPE (STYLE)	REFERENCE SOURCE		CONDITION
			SOURCE NAME	DATA ITEM NAME	
1421	N2 STATUS STRUCTURE N2		S2: STATUS BASKET	*	
1422	N3 STATUS STRUCTURE N3		Net3 STATUS	*	

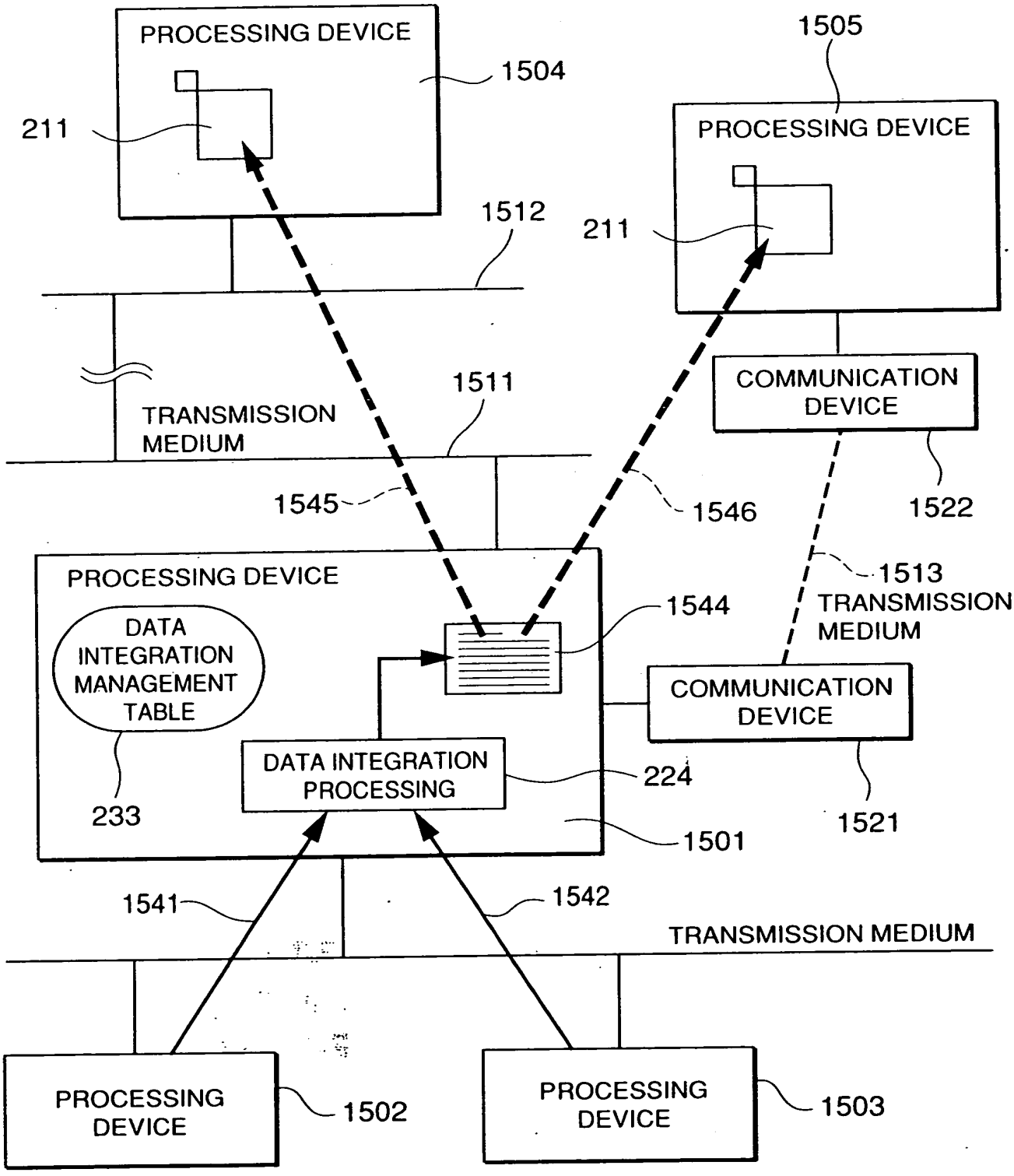
	BASKET ITEM NAME	TYPE (STYLE)	REFERENCE SOURCE		CONDITION
			SOURCE NAME	DATA ITEM NAME	
1431	N3 STATUS STRUCTURE N3		S6: STATUS TABLE	*	

FIG.17B

232:EVENT LINKING DATA TABLE

	COLLECTION EVENT		RESPONSE DESTINATION	DATA NAME	COLLECTION DATA ITEM	COLLECTION CONDITION	ACTIVE STATUS
	TYPE	CONDITION					
1441	Upd: STATUS BASKET		S1	STATUS BASKET*			1
	⋮						

FIG.18


PROCESSING DEVICE
1504
211
1505
PROCESSING DEVICE
211
1512
TRANSMISSION MEDIUM
1511
COMMUNICATION DEVICE
1522
1545
1546
1513
TRANSMISSION MEDIUM
PROCESSING DEVICE
DATA INTEGRATION MANAGEMENT TABLE
1544
COMMUNICATION DEVICE
DATA INTEGRATION PROCESSING
224
233
1521
1501
1541
1542
TRANSMISSION MEDIUM
PROCESSING DEVICE
1502
PROCESSING DEVICE
1503